



Digital Printing on CeramicSteel File Submission Guidelines

The following guidelines define the types of files and resolutions that are suggested to ensure your files print as intended. If you have any questions, please contact:

Polyvision Studio
PVStudioteam@polyvision.com

OPERATING SYSTEMS

Polyvision supports files built on both the Windows and Macintosh platforms. Since fonts are not typically cross-platform compatible, please see notes below concerning fonts for your files.

SOFTWARE

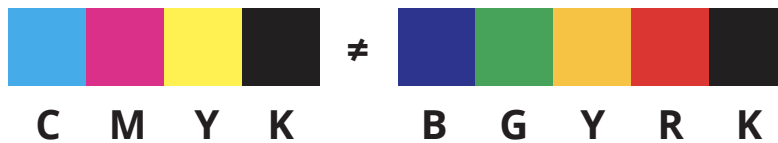
Polyvision prefers files built in Adobe Illustrator CC (2015 or later) Adobe Photoshop CC (2015 or later), and Adobe InDesign CC (2015 or later). If you are working in a program other than Adobe CC, please export your file to a PDF using the PDF/X-1:2001 standard settings. Please be aware that PDF files cannot be easily manipulated if corrections need to be made by Polyvision.

ARTWORK

- Submit artwork at 100% final print size.
- Vector artwork can be built at a proportionally smaller percentage (i.e., 50%, 25% etc). Please indicate percentage.
- Pixel images should be at a minimum of 300 pixels per inch (PPI) at full output size.
- Files should be in the CMYK color mode. Embed Pantone spot colors where applicable and do not convert spot colors to CMYK.
- Save pixel based files as .TIFF, .PSB, or .PSD. When saving TIFFs, do not use LZW compression.
- Include .25" of bleed on each side of artwork.
- Link placed images as opposed to embedding them. Provide linked files.
- When submitting a flattened image file, please also provide the original layered Adobe Photoshop document (.psd or .psb) when applicable. This will allow the file to be adjusted if necessary.
- If you intend to use combinations of type and images, and/or effects such as drop shadows and gradients, PolyVision strongly recommends that these files be built in Photoshop as undesired results can occur when these effects are applied in InDesign and Illustrator.
- All fonts should be converted to outlines or curves.

COLOR GAMUT

Ceramic Inks for digital printing are formulated with various finely ground organic pigments and inorganic oxide-based pigments to create Blue, Green, Yellow, Red, and Black base colors used in digital ceramic printers. These inks differ from the traditional process color inks Cyan, Magenta, Yellow, and Black (CMYK) where the inks are made with synthetic dye compounds.



The absence of Magenta and Cyan in ceramic ink limits the color range in that bright pink, purple, and high-value light blues are not attainable. Artwork with these hues will be automatically adjusted by the RIP printer software to fall within the ceramic ink gamut and will tend to present with a dull or gray/brown appearance. For the best results, it is ideal to avoid pink, purple, and high-value light blue hues if at all possible.

The ceramic inks used for digital printing fuse into the enamel surface of CeramicSteel sheet to produce a permanently colorfast and durable surface unlike any other architectural panel product produced on a CMYK-based printing device.

GRAIN (DOT SIZE)

The print heads in Polyvision's digital printer generate "dots" that is relatively large in size to allow for the powdered pigment granules in the ink solution to be dispensed onto the surface while printing. Each color in the artwork is created from varying amounts of colored dots from the Blue, Green, Yellow, Red, and Black base ink colors. This produces the appearance of "grain" in the finished print. The grain structure will vary depending on the hues in the artwork and the type of artwork. Generally, lighter colors will appear grainier than darker colors, and vector art with solid colors or gradients may appear grainier than raster images. This is only a concern when the finished piece is viewed up close. Even very grainy artwork appears smooth from 4-6 feet away.

Image Size Guide

Sheet Size	Level 1		Level 2		Level 3		Level 4	
	Horz. Pixels	Vert. Pixels	Horz. Pixels	Vert. Pixels	Horz. Pixels	Vert. Pixels	Horz. Pixels	Vert. Pixels
4x4	3456	3456	7200	7200	9600	9600	14400	14400
4x6	5184	3456	10800	7200	14400	9600	21600	14400
4x8	6912	3456	14400	7200	19200	9600	28800	14400
4x10	8640	3456	18000	7200	24000	9600	36000	14400
5x5	4320	4320	9000	9000	12000	12000	18000	18000
5x6	5184	4320	10800	9000	14400	12000	21600	18000
5x8	6912	4320	14400	9000	19200	12000	28800	18000
5x10	8640	4320	18000	9000	24000	12000	36000	18000

Sheet Size	Level 1	Level 2	Level 3	Level 4
	Megapixels	Megapixels	Megapixels	Megapixels
4x4	12	52	92	207
4x6	18	78	138	311
4x8	24	104	184	415
4x10	30	130	230	518
5x5	19	81	144	324
5x6	22	97	173	389
5x8	30	130	230	518
5x10	37	162	288	648

- 1 - Minimum: Will print, but visible softness expected
- 2 - Better: Suitable for most large panels
- 3 - Quality: Recommended for premium installs
- 4 - Best: Ideal for close viewing or fine details.

NOTE: The print resolution of the finished product is fixed. Increasing DPI input will increase available information for the printer to smooth gradients and fine lines. For most installs images that fall within the 2-3 category range will suffice.